The Montreal Office would welcome contributions of photographs, old or new, for this collection. Wherever possible a short note on subject, locality, and source should be written on the back of each picture.

Resignation of Dr. M. C. Shelesnyak

Dr. M. C. Shelesnyak has recently resigned from his position as Director of the Institute's Baltimore-Washington Office. No successor to Dr. Shelesnyak has yet been appointed, and for the time being the technical work of the Baltimore-Washington Office is being handled by the New York Office.

Institute Bills in Congress

Early this year legislation authorizing Federal financial aid to the Arctic Institute was introduced in the United States Congress. The measure was most favourably supported at hearings before a Sub-committee of the House Foreign Affairs Committee. However it is now apparent that the Bill will not be passed during the present session of Congress.

The Institute wishes to express its very sincere appreciation to those Associates who wrote to Congressmen in support of the legislation. Their action has been extremely helpful and will stand the Institute in good stead in the future.

ARCTIC INSTITUTE RESEARCH REPORTS

The following reports describe some of the work carried out with the assistance of Arctic Institute grants during the field season of 1949.

ANTHROPOLOGY

Application of tree-ring chronology to archaeology in Alaska

During the 1949 field season Professor J. L. Giddings continued excavation of two midden sites, Nukleet and Iyatayet, on Cape Denbigh, Norton Sound (*Arctic*, Vol. 2 (1949) p. 124). Excavation at Nukleet was carried out by Mr. and Mrs. Wendell Oswalt under the supervision of Professor Giddings who excavated at Iyatayet.

Iyatayet is a stratified site consisting of thick deposits of partly frozen Eskimo midden and house debris overlying other stratified clays that are mainly thawed. During the season six cuts were made in those areas where the clay strata were undisturbed so that the full association of the earlier levels could be studied. The cuts totalled about 1300 square feet of ground surface. The contents of the Microlithic Layer, the lowest layer of occupation, were nearly all of flinty materials. Organic material was almost wholly lacking, only two pieces of bone and one of charcoal being recovered. Certain of the flint artifacts, all of which were very small, have been identified with types known from the Folsom or Yuma horizons in the western United States. Nearly a third of the collection is made up of flake-knives and burins, the latter being identical in workmanship with Upper Paleolithic types from Europe and elsewhere. The Middle Clay Layers appeared to represent a culture most closely related to Ipiutak and Near Ipiutak cultures. Most of the flint work in these layers is in basalt, the local matrix, instead of in the cherts and obsidian of the bottom Microlithic Layer.

At Nukleet an area 30 by 40 feet was excavated. In this section as many as five house floors were exposed, some of them overlapping. The different levels found supported observations made in the 1948 excavations: that the upper two feet consist of late material, perhaps dating about 1600 A.D.; that the next levels show relation to Western Thule sites; and that the bottom levels correlate with Early Punuk sites. In the middle

and lower levels objects of bone, wood and fibre were in excellent preservation. Many timbers for tree-ring dating were uncovered at Nukleet to supplement those obtained during 1948.

Anthropological investigations in Aleutian Islands

During the summer of 1949 Mr. William S. Laughlin and Mr. Gordon Marsh carried out anthropological investigations in the Aleutian Islands. They were accompanied by Mr. Fred A. Milan, a student of anthropology from the University of Alaska. Several days were spent at Adak and studies were also made at Nikolski village on Umnak Island, Atka village on Atka Island, and Attu Island. Investigations included taking blood tests, making a specialized study of the detailed and extensive anatomical knowledge of the Aleuts and collecting material on the Aleut dialects. Excavations were made at Adak, Nikolski, and on Attu Island. All specimens collected are in the Oregon State Museum of Anthropology at the University of Oregon.

BIOLOGY

Botanical investigations of parts of the Brooks Range and the Arctic Slope of Alaska

During the summer of 1949 Mr. Lloyd A. Spetzman continued collecting vascular flora from the Arctic Slope of Alaska (*Arctic*, Vol. 2 (1949) p. 124). Major collections were made at five stations: Anaktuvuk Pass (North Side, Anaktuvuk River, Tulugak Lake), Willow Creek, Umiat, Point Barrow and Barrow village, and Alaktak. In addition minor collections were made at: Anaktuvuk Pass (South Side, John River, Hunt Fork), Howard Pass, Colville River valley between the Ipnavik and Etivluk rivers, Carbon Creek, and Maybe Creek. At least 250 species of plants were collected.

The material obtained during the 1949 and previous seasons is being classified at the University of Minnesota. Identifications open to question have been checked with authorities and the taxonomy of all plants collected up to the end of 1948 is now considered satisfactory and complete.

Entomological investigations in northern Alaska

Dr. Neal A. Weber was in northern Alaska from late June to early August 1949 studying the insect life. Places visited included Umiat, Point Barrow, Anaktuvuk Pass, Oumalik, and Fish Creek. Collections were made of those insects concerned with the pollination of flowers and the biological roles of others, such as those used as food by fresh water fishes, were studied. The insect fauna was found to reach a maximum the latter part of July. Diptera were by far the most numerous of the readily visible insects and several thousand specimens were taken. Collembola, mites, spiders, and ectoparasites from a number of mammals and birds were also collected. The material is now being examined by specialists and used for study purposes among students.

Entomological and botanical investigation in Newfoundland

Drs. Harry Krogerus, Carl H. Lindroth, and Ernst Palmén spent June, July, and August of 1949 in Newfoundland making entomological collections. A fourth member of the party, Dr. R. Tuomikoski studied the bryophite flora and vascular plants of the region. During June the party worked in areas along the south coast and at several localities in the southwest. In July investigations were made in the northwestern peninsula and in the Bonne Bay area. After returning from the north towards the middle of August the party made collections in the vicinity of Corner Brook and at eight selected places along the railway line. In all, 76 localities were investigated.

The specimens, including spiders, moths, butterflies, beetles, and other insects, are now being identified. In view of the large number of species and specimens involved, it will be some time before determination of the col-

lections will be complete. Preliminary investigation of the moss collection indicates some sixty to seventy species which, so far as is known, have not previously been reported from Newfoundland. The vascular plant collection is being examined at l'Université de Montréal.

Ornithological and geographical investigations in the Perry River region

Ornithological and geographical investigations were carried out in the Perry River region in June and July 1949 by a party consisting of Mr. Harold Hanson, of the Illinois Natural History Survey; Mr. Paul Queneau, Westport, Conn.; and Mr. Peter Scott, of the Severn Wildfowl Trust, England. The group arrived at Perry River June 6 and for the following six weeks studied the surrounding area on foot and, after break-up, by canoe. On July 18 the party was joined by Mr. James Bell, veteran bush pilot of Nickel Belt Airways, with a Fairchild Husky and during the next two weeks the quadrangle formed by the sea coast, Ellice River, MacAlpine Lake, and Armark River was investigated from the air. The party returned south via Baker Lake, Churchill, and Moose Factory in early August.

The ornithological investigations were concerned chiefly with geese and ducks. No Ross's geese were breeding on the lakes where they were found by Angus Gavin in 1940, but a breeding colony was found on five islands in a lake about twenty-five miles inland where two hundred and sixty nests were counted. Ross's geese were also found moulting on lakes to the west of the Armark River and others which may have been of this species were seen on some lakes near the headwaters of the Perry. None of these were nesting but the lakes may have breeding colonies in a normal summer. Twenty-five of the geese were banded and ten were brought back alive for further study at the Severn Wildfowl Trust. No breeding colony of white-fronted geese was found and only four breeding pairs were located. Critical examination will be made of the specimens taken. One colony of breeding black brant was found on an island about 1½ miles east of the mouth of the Perry River. During the aerial survey from the Ellice River to the Armark River only one other colony of brant was seen. Many pairs of Canada geese were observed breeding singly on islands in lakes and among the Ross's goose colony. Lesser snow and a few blue geese also bred in small numbers in the Ross's goose colony. No nests of the pintail were found and no young were seen. There were large numbers of moulting males in the vicinity, but very few females. The two commonest ducks were the king eider and the old-squaw, both of which were breeding throughout the area. The following species which had not previously been recorded from the area were observed: peregrine falcon, pomarine jaeger, glaucous gull, green-winged teal, red-breasted merganser, white-rumped sandpiper, red-backed sandpiper, Baird's sandpiper, knot, ruddy turnstone, American pipit, Savannah sparrow.

Geographical studies, including ground reconnaissance and solar position fixes, showed that the existing maps of the region are inaccurate. Meteorological observations were taken twice daily during the period June 11 – July 31. The mean temperatures in June and July were about 34°F and 44°F respectively. Relative humidity was usually very high. The season was about two weeks later than normal, and ice conditions in Queen Maud Gulf were said to be the most severe in living memory. Approximately 15 miles of the Perry River were mapped on the ground by plane table, and vertical and oblique aerial photographs were taken of the same area. Other studies included records of ice conditions; permafrost; volume discharge of the Perry River; river, lake and off-shore water depths and temperature; sea water salinity; and tidal range.

GEOLOGY

Study of the stratigraphy of the Dundas Harbour region

Mr. Donald B. Wales and Mr. Vincent E. Kurtz spent the last two weeks of

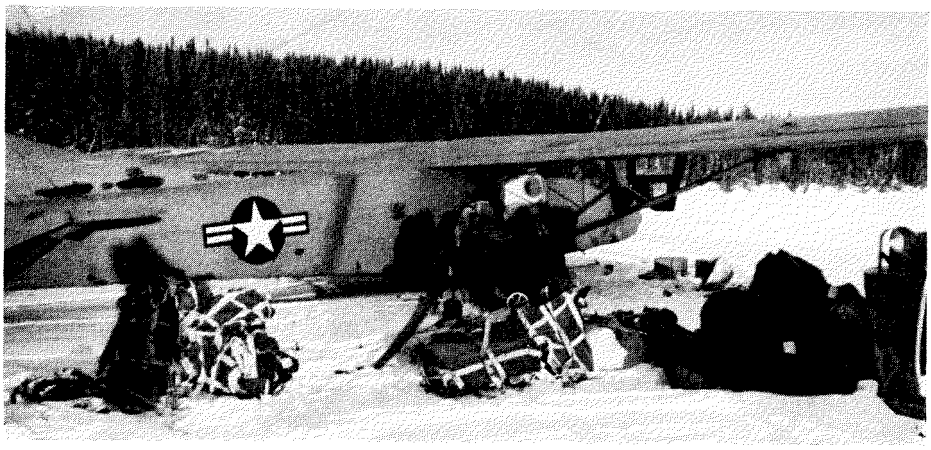
August 1949 in the vicinity of Dundas Harbour, Devon Island, making a stratigraphic study of the region. The party was transported by the U.S.S. *Edisto* on her northern supply mission. Investigations were confined to the areas immediately to the west and northwest of Dundas Harbour. Three closely related and overlapping stratigraphic sections representing over 3000 feet of sediments were measured and about 250 lithologic samples were taken. Fossils were collected from Lower and Middle Cambrian, and Lower and Middle Ordovician beds. Study of the data and fossils collected is being made at Dartmouth College under the supervision of Professor Andrew H. McNair.

ECONOMIC STUDY

Economic studies in Alaska

Dr. Demitri B. Shimkin spent two months in Alaska in the summer of 1949 studying the economy of the Territory. He visited Juneau, Anchorage, Fairbanks, and Fort Yukon and from interviews with local authorities, consultation of records and personal observations collected data regarding the agricultural and mineral resources, living costs, medical problems and conditions, and transportation and educational facilities. Particularly detailed investigations were made at Fort Yukon where Dr. Shimkin spent over three weeks. A detailed report on the economy of the Fort Yukon region is now in course of preparation.

NORTHERN NEWS



Glider landing equipment on Blair Lake.

U.S. Air Force survival ration studies in Alaska

A field test was carried out in Alaska during January and February of 1950 in an attempt to establish requirements for an all-purpose survival ration. The test took place at Blair Lake, some fifty miles southeast of Ladd Air Force Base, by a group of scientists and fourteen volunteers from the U.S. Air Force. In